Okay to enter.
/JH/ 4/21/10

SPECIFICATION AMENDMENT

Please replace the paragraph beginning at page 4, line 29 with:

As embryogenic cotton callus develops, it is transferred to embryo maturation media. Non-embryogenic tissue, on the other hand, is returned to the same induction culture described and monitored for the formation of embryogenic tissue. The maturation media used is preferably supplemented with a mixture of amino acids. The culture also preferably contains a solid support matrix. The transgenic cotton embryos are maintained in this culture until they mature (i.e., grow to a suitable size, typically several millimeters in length). Tissue is cultured under dark or limited light conditions, and each plate is sealed with a suitable sealing material, including, but not limited to, ~~Parafilm~~ PARAFILM M.

Please replace the paragraph beginning at page 7, line 5 with:

After embryogenic callus forms, it is preferably transferred to a culture containing a maturation media. The maturation media used in the preparation of mature cotton embryos preferably contains a solid support matrix. The solid support matrix may generally be any type of solid support compatible with the present invention, more preferably a silica/alumina chip, cloth, felt, paper towel, or filter paper, and most preferably filter paper. The culture plates are wrapped with a suitable sealing material, including, but not limited to, wax film, tape, or plastic wrap. Preferably the sealing material is ~~Parafilm~~ PARAFILM M laboratory film (American National Can, Chicago, Ill.).

Please replace the paragraph beginning at page 20, line 11 with:

Once the tissue has become embryogenic, any lighting conditions are acceptable, but the use of dark or limited lighting conditions or green light is preferred. The culture plates are wrapped with a sealing material, preferably ~~Parafilm~~ PARAFILM M.

Please replace the paragraphs beginning at page 31, line 3 with:

For the light treatment tissue was incubated in a 16/8 day/night cycle at 28°C in an incubator/warm room. For the dark treatment, tissue was incubated in continuous dark at 28°C in an incubator/warm room. The plates containing the tissue were either sealed in ~~Parafilm~~ PARAFILM M (American National Can, Chicago, Ill.) or incubated without being sealed.

The effect of dark growth conditions and ~~Parafilm~~ PARAFILM were tested and compared to lighted conditions without ~~Parafilm~~ PARAFILM treatment. Dark growth conditions combined with sealing the plates with ~~Parafilm~~ PARAFILM increased the frequency of embryo maturation and germination (Table 9).

TABLE 9 Effect of Dark Growth Conditions and ~~Parafilm~~ PARAFILM on Embryo Maturation and Germination (pMON42611)

Lighting	Wrap treatment	# Lines tested	# Lines with plantlets	Frequency of plantlet formation per line
light	unwrapped	30	11	37%
light	~~Parafilm~~ PARAFILM	30	15	50%
dark	unwrapped	30	7	23%
dark	~~Parafilm~~ PARAFILM	30	21	70%